**Ejercicios SQL Bootcamp Data Engineer – EDVAI**

**AVG**

1)

**select** c.category\_name, p.product\_name, p.unit\_price,

**avg** (p.unit\_price) **over** (**partition** **by** c.category\_name) **as** avgunitpricecategory

**from** categories c **inner** **join** products p

**on** c.category\_id =p.category\_id

2)

**select** o.order\_id , o.customer\_id , o.employee\_id , o.order\_date , o.required\_date , o.shipped\_date ,

**avg** ((od.unit\_price\*od.quantity)) **over** (**partition** **by** o.customer\_id) **as** avgorderamount

**from** orders o **inner** **join** order\_details od

**on** o.order\_id = od.order\_id

3)

**select** p.product\_name , c.category\_name, p.quantity\_per\_unit , od.unit\_price , od.quantity ,

**avg** (od.quantity) **over** (**partition** **by** c.category\_name) **as** avgquantity

**from** order\_details od

**inner** **join** products p **on** od.product\_id = p.product\_id

**inner** **join** categories c **on** c.category\_id = p.category\_id

**order** **by** c.category\_name , p.product\_name

**MIN**

4)

**select** o3.customer\_id , o3.order\_date ,

(**select** **MIN**(order\_date) **from** orders

**where** o3.customer\_id = orders.customer\_id) **as** minorderdate

**from** orders o3

**group** **by** o3.customer\_id , o3.order\_date

**order** **by** o3.customer\_id

**MAX**

5)

**select** p.product\_id , p.product\_name , p.unit\_price , p.category\_id ,

(**select** **MAX** (unit\_price) **from** products

**where** p.category\_id = products.category\_id) **as** maxunitprice

**from** products p

**group** **by** p.category\_id , p.product\_id , p.product\_name , p.unit\_price

**order** **by** p.category\_id

**ROW\_NUMBER**

6)

**select**

**row\_number** () **over** (**order** **by** **sum**(od.quantity) **desc**) **as** ranking,

p.product\_name,

**sum**(od.quantity) **as** totalquantity

**from** products p

**join** order\_details od **on** p.product\_id = od.product\_id

**group** **by** p.product\_name

**order** **by** ranking

7)

**select**

**row\_number**() **over** ( **order** **by** c.customer\_id **asc**) **as** ranking,

c.customer\_id , c.company\_name , c.contact\_name , c.contact\_title , c.address

**from** customers c

8)

**select**

**row\_number**() **over** ( **order** **by** e.birth\_date **desc**) **as** ranking,

**concat**(e.first\_name, ' ', e.last\_name) **as** employeename ,

birth\_date

**from** employees e

**SUM**

9)

**select**

**sum**((od.unit\_price\*od.quantity)) **over** (**partition** **by** o.customer\_id ) **as** sumoorderamout,

o.order\_id,

o.customer\_id ,

o.employee\_id , o.order\_date , o.required\_date

**from** order\_details od

**inner** **join** orders o **on** od.order\_id = o.order\_id

**group** **by** o.customer\_id , o.employee\_id , o.order\_date, o.required\_date , od.unit\_price, od.quantity, o.order\_id

**order** **by** o.customer\_id

10)

**select**

c.category\_name,

p.product\_name,

od.unit\_price,

od.quantity,

**sum** ((od.unit\_price \* od.quantity)) **over** (**partition** **by** c.category\_name) **as** totalsales

**from** order\_details od

**inner** **join** products p **on** od.product\_id = p.product\_id

**inner** **join** categories c **on** c.category\_id =p.category\_id

**group** **by** c.category\_name, p.product\_name, od.unit\_price, od.quantity, od.order\_id

**order** **by** c.category\_name, p.product\_name

11)

**select**

o.ship\_country **as** country,

o.order\_id ,

o.shipped\_date ,

o.freight ,

**SUM**(o.freight) **over** (**partition** **by** c.country) **as** totalshippingcost

**from** orders o

**inner** **join** customers c **on** o.customer\_id = c.customer\_id

**group** **by** o.ship\_country , o.order\_id, o.shipped\_date , o.freight , o.ship\_country, c.country

**order** **by** c.country, o.order\_id **asc**

**RANK**

12)

**select**

c.customer\_id,

c.company\_name,

**sum** ((od.unit\_price \* od.quantity)) **as** totalsales,

**rank** () **over** (**order** **by** **sum** ((od.unit\_price \* od.quantity)) **desc**)

**from** customers c

**inner** **join** orders o **on** o.customer\_id = c.customer\_id

**inner** **join** order\_details od **on** od.order\_id = o.order\_id

**group** **by** c.customer\_id , c.company\_name

13)

**select**

e.employee\_id ,

e.first\_name ,

e.last\_name ,

e.hire\_date ,

**rank** () **over** (**order** **by** **Min**(e.hire\_date) **asc**) **as** **Rank**

**from** employees e

**group** **by** e.employee\_id ,e.first\_name ,e.last\_name ,e.hire\_date

**order** **by** **rank**

14)

**select**

p.product\_id,

p.product\_name ,

p.unit\_price ,

**rank** () **over** (**order** **by** **Max**(p.unit\_price) **desc**) **as** **Rank**

**from** products p

**group** **by** p.product\_id,p.product\_name ,p.unit\_price

**order** **by** **rank**

**LAG**

15)

**select**

od.order\_id,

od.product\_id,

od.quantity,

**lag** (od.quantity ) **over** (**partition** **by** o.order\_id **order** **by** o.order\_date **asc**) **as** prevquantity

**from** order\_details od

**inner** **join** orders o **on** od.order\_id = o.order\_id

**group** **by** od.order\_id, od.product\_id, od.quantity, o.order\_date, o.order\_id

16)

**select**

o.order\_id,

o.order\_date,

o.customer\_id,

**lag** (o.order\_date) **over** (**partition** **by** o.customer\_id **order** **by** o.order\_date **asc**) **as** lastorderdate

**from** orders o

**group** **by** o.order\_id, o.order\_date, o.customer\_id

17)

**select**

**select**

p.product\_id,

p.product\_name,

od.unit\_price,

**lag** (**Max**(od.unit\_price)) **over** (**order** **by** p.product\_id **asc**) **as** lastunitprice,

(od.unit\_price - (**lag** (od.unit\_price) **over** (**partition** **by** p.product\_id ))) **as** pricedifference

**from** order\_details od

**inner** **join** products p **on** od.product\_id = p.product\_id

**group** **by** p.product\_id, p.product\_name, od.unit\_price

**LEAD**

18)

**select**

**select**

p.product\_name,

od.unit\_price,

**lead** (**Max**(od.unit\_price)) **over** (**order** **by** p.product\_id) **as** nextprice

**from** products p

**inner** **join** order\_details od **on** od.product\_id = p.product\_id

**group** **by** p.product\_name, od.unit\_price, p.product\_id

19)

**select**

c.category\_name,

**sum** ((od.unit\_price \* od.quantity)) **as** totalsales,

**lead** (**sum** ((od.unit\_price \* od.quantity))) **over** (**order** **by** c.category\_name) **as** nexttotalsales

**from** categories c

**inner** **join** products p **on** c.category\_id = p.category\_id

**inner** **join** order\_details od **on** od.product\_id = p.product\_id

**group** **by** c.category\_name